

Amitabh Shrivastava

+1-929-386-4190
✉ tinkrmind@gmail.com
🌐 www.tinkrmind.me

Education	Institute	Year	GPA
MPS(Creative Technology)	ITP, NYU	2019	N/A
Bachelor of Science(Research) Major: Physics, Minor: Biology	Indian Institute of Science(IISc ¹) Bangalore, India	2015	7.2 / 8.0

Skills

Languages Python, C, C++ ●●●●● JS, Terminal ●●●●● MATLAB, HTML ●●●●●	Software Eagle, Autodesk Fusion ●●●●● Adobe Suite ●●●●● Atmel Studio, Blender ●●●●●
Hands On SMD soldering, Digital circuit design, CNC, Woodshop ●●●●● Analog circuit design, 3D printing, MetalShop ●●●●●	

Experience

- June – Aug 2018 **Academic Fellow**, *IDEO*, Cambridge.
Prototyped natural AR interactions and came up with a novel metric for rating crypto currencies.
- Sept 2018 – Now **Engineering Consultant**, *NGEMS*, NYC.
Designed and prototyped world's smallest active asset tracking tag using indoor GPS.
- Nov 2016 – Aug 2017 **Hardware Engineer**, *locus.sh*, Bangalore, India.
Lead the hardware department for locus.sh, a logistics company. Conceptualized SizeUp, a handheld scanner for measuring box sizes in the field. Brought the product to pilot testing.
- Aug 2015 – Oct 2016 **Interactive Systems Engineer**, *SuperSuit*, San Jose, CA.
SuperSuit was designed to make physical freeplay addictive like video games. I worked closely with the founders, prototyping interactions, and acting as the liaison between design, engineering and manufacturing teams. I presented the product in the Bay Area **Maker Faire'16** and **TechCrunch Disrupt '16**.
- Sept 2013 – July 2015 **Engineering Consultant**, *Center for Ecological Sciences(CES)*, IISc.
Developed and fabricated various tools for ecological research. Chief among them, a low-speed wind tunnel, a insect wing beat frequency meter, 3D tracker to measure insect flight, underwater gates for fishes and multiple drones for aerial photography.
- Mar 2014 – July 2015 **Sparse Sensor Based Silhouette detector**, *CES, IISc*, Undergrad thesis project.
Designed and fabricated a passive infrared detector to measure the silhouette of an object such as an elephant to an unprecedented accuracy. Presented the prototype in Student Conference on Conservation Science, 2014, Bangalore. The detector is awaiting field trial.

Camps/Hackathons

- Aug – Dec 2017 **Prototyping Fund**, *Leslie eLab, NYU*.
Developed a hardware re-programmable breadboard.
- Dec 2016 **STEAM School**, *Makers Asylum, Mumbai*.
Developed DharaWE, a community building app aimed at Dharavi district, Mumbai while participating as a peer in the design thinking and prototyping workshop. Organized by The Center for Research and Interdisciplinary, France and Makers Asylum, India.
- Nov 2016 **Open hackathon**, *Startup Mechanics, Bangalore*.
As the team lead of four, won first place for prototyping a modular smart kitchen garden.

¹IISc is the highest ranked Institute of higher learning in India

- Aug 2015 **In50Hrs IoT Hackathon**,, *MediaTek, Bangalore*.
As the team lead of three, won fourth place prototyping a pollution monitoring system for bikes.
- May 2013 **Summer Course in Expt. Phy.**, *Tata Inst. of Fundamental Research, Mumbai*
Presented a talk : 'Quirky results with the Physical Pendulum: Instruments are to blame'
- Aug 2012 **Sixth Asian Science Camp**, *Jerusalem, Israel*
Part of the Indian Delegation consisting of 30 students.

Internships

- May – July 2014 **International Physics Intern**, *Dept of Physics, Brandeis University, Waltham, MA*,
Guide: Prof. John F. C. Wardle.
Learnt to program monte carlo simulations in MATLAB. Found a novel formula for orientation of Quasars based on radio observations and simulation results.
- May –June 2013 **Summer Intern**, *Homi Bhabha Center for Science Education, Mumbai*,
Guide: Dr. Shirish Pathare.
Worked on developing a handheld datalogger using for recording variable voltage and current and calculating real-time rate of change.

Publications

"An Experiment on Projectile Motion" -Amitabh Shrivastava, M K Raghavendra, K P Ramesh
Resonance ISSN 0971-8044, v. 20, no. 6, p458, May 2015

This apparatus is being used to train high-school teachers at the Talent Development Center, IISc.

"Life-history strategy, resource dispersion and phylogenetic associations shape dispersal of a fig wasp community" - Vignesh Venkateswaran, **Amitabh Shrivastava**, Anusha Kumble, Renee Borges, DOI10.1186/s40462-017-0117-x

Key Scholastic Achievements

- Mar 2016 **Intel IoT Roadshow**², *Bangalore*.
Secured runners up place for a spelling aid for dyslexic kids, as a part of team of two.
- Jan 2015 **MIT Media Labs Design and Innovation Workshop**, *Gandhinagar*.
As the team lead of four, prototyped and presented a theft resistant bag for the urban environment.
- 2013 Awarded **Gold Medal**³ in the National Graduate Physics Examination(NGPE).
- 2011 Ranked among the **top 0.4% nationally** in the IIT Joint Entrance Exam.
- 2011 – 2015 Recipient of the prestigious Kishore Vaigyanik Protsahan Yojana (**KVPY**) fellowship.
- 2011 Secured **national rank 47** in National Science Talent Search Examination.
- 2011 Secured **national rank 59** in National Cyber Olympiad.
- 2008 – 2011 Recipient of National Talent Search Examination(**NTSE**) Scholarship.
- 2006 Secured **national rank 2** in the Nationwide Biotechnology Olympiad.

Co-Curricular Activities

I am an avid maker and spend practically all of my free time in my workshop hacking electronics.
@tinkr mind : GitHub, Instructables, HackaDay

- Feb 2014 As the engineering coordinator for Pravega – IISc’s Science and cultural festival– I lead a team of 14 volunteers to organise engineering competitions.
- 2013, 2012 Built various high voltage demonstrations for IISc open day, including a 100KV VandeGraff generator and a macroscopic, analog of an electrostatic particle accelerator.

²Intel IoT Roadshow is the largest hardware hackathon in India

³Awarded to 5 students from amongst thousands of applicants.